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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,991	09/15/2000	Jeffrey Scott Kuskin	73139/0269824	3505

4586 7590 06/01/2005

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ELLICOTT CITY, MD 21043

EXAMINER

COLIN, CARL G

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,991

Applicant(s)

KUSKIN ET AL.

Examiner

Carl Colin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 30 June 2004 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/16/2005 has been entered.

Response to Arguments

2. Applicant's arguments, pages 10-14, filed on 3/16/2005, with respect to the rejection of claims 1-18 have been fully considered, but they are moot in view of new ground of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.1 **Claims 1-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Non-Patent Literature: Clarke, O. Sandberg, B. Wiley, and T. Hong, "Freenet: A Distributed Anonymous Information Storage and Retrieval System," ICSI Workshop on Design Issues in Anonymity and Unobservability; 21 pages, July 2000, hereafter **Clarke et al** in view of US Patent 6,523,118 to **Buer**.

3.2 **As per claims 1, 3, 7, 9, 13, and 15, Clarke et al** substantially teaches a key-caching system for operation on a packet received from an external source, the packet comprising a header that is not encrypted and a body that is encrypted, the system comprising: a system memory; a networking unit including a system memory including entries for source address and corresponding keys (page 3-4 architecture and page 9, lines 2-5); a controller; a processor; the controller effecting communication and data transfer between the system memory, the networking unit and the processor, wherein the key-caching program comprising code to effect; **Clarke et al** discloses a network system that comprises of servers and routers, sending, and receiving nodes. It is well known that servers and routers contain processors as controllers for effecting communication and data transfer. **Clarke et al** discloses establishing acknowledgment-responsive wireless communication with the external source (see page 11); extracting from the header a source address (page 11, first paragraph); determining whether the source address is included in the cache (page 6, section 3.2); when the source address is included in an entry of the cache, authorizing an acknowledgment signal for the external source, extracting from the entry of the cache a key corresponding to the source address (page 6, section

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3.2), and using the key to decrypt the body of the packet (page 10, lines 7-8); **Clarke et al** further discloses if the key is not in the cache look for key in routing table and if key is found, create a new entry in cache that will prepare the cache for a subsequent request for the same key so that data can be decrypted (page 6, section 3.2) that meets the recitation of when the source address is not included in an entry of the cache, determining whether the source address is included in an entry of the system memory; and when the source address is not included in an entry of the cache and the source address is included in an entry of the system memory, extracting from the entry of the system memory a key corresponding to the source address, and storing the source address and the key as a new entry in the cache to prepare the cache for decrypting a packet subsequently re-sent by the external source. **Clarke et al** discloses using authorization signal so that messages can be restarted and not lost and discloses sending message if successful (page 11-12). In another embodiment, **Clarke et al** discloses if the key is not found send a signal to start a timer while the request is being processed (last paragraph of page 11 through page 12 and page 7) that meets the recitation of wherein when the source address is not included in an entry of the cache, authorizing an acknowledgment signal for anticipatory transmission to the external source of the packet prior to retrieval of the key corresponding to the source address. **Clarke et al** discloses retrieving the key prior to arrival to avoid latency but is silent about decrypting the packet prior to arrival of subsequent packet. **Buer** in an analogous art teaches a secure cache computing system including cache, memory system and a controller system and also discloses to avoid delay when there is a cache miss data can be decrypted in the memory system and sent to cache without halting processor operation. Therefore, it would have been obvious at the time the invention was made to modify the system of **Clarke et al** to allow

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decryption of the body of the packet to be done in system memory if not in the cache prior to arrival of a subsequent packet. The motivation to do so is given by **Buer** who suggests that the decryption will allow some of the decrypted data to be forwarded and by avoiding delay the remaining portion can be decrypted without halting the processor operation (column 2, lines 44-55).

As per claims 2, 8, and 14, Clarke et al discloses time-out (see page 11) that meets the recitation of dropping the packet of wherein the key-caching program further comprises code to effect: when the source address is not included in an entry of the cache, dropping the packet, which is also known in the art when packet policy rule does not match.

As per claims 4-6, 10-12, and 16-18, the combined references teaches a cache for fast processing that meets the recitation of wherein the cache includes fast memory (see Clarke et al page 6).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Many of the claimed features are disclosed in these patents such as cache memory latency and key retrieval.

US Patents: 5,845,324 White et al. 6,507,908 Caronni ; 5,283,882 Smith et al.
6,771,646 Sarkissian et al ; 5,930,472 Smith ; 5,813,031 Chou et al ;
5,701,432 Wong et al 5,450,563 Gregor.

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US Patent Publication: US 2004/0083286 Holden et al.


4.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cc

Carl Colin
Patent Examiner
May 26, 2005


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
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